FORM No. 62.

Forest Department, Bombay, Northern Circle.

Financial Results of the year 1888-89.

Division.	Timber and other Produce removed from the Forests by Government Agency.		Other Revenue.		Formation, Protection, and Improvement of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
North Thána ...	25,745	8,763	2,00,186	7,466	64,158	2,25,931	80,387	
South Thána ...	14,531	6,400	1,89,976	4,670	96,826	2,04,507	1,07,896	
East Khándesh ...	17,823	4,554	75,806	5,847	45,422	93,629	55,823	
West Khándesh ...	22,846	6,347	1,05,326	6,712	48,094	1,28,172	62,053	
Násik	32,274	3,707	61,106	2,585	82,120	93,380	88,412	
Ahmednagar ...	10,687	4,455	44,459	1,472	49,820	55,146	55,747	
Poona	42,177	8,313	59,732	3,635	73,825	1,01,909	85,773	
Sátára	35,813	12,843	49,543	5,361	61,637	85,356	79,841	
Sholápur	1,323	618	23,324	455	27,897	24,647	28,970	
Surat	42,192	11,026	57,616	10,373	29,004	99,808	50,403	
Panch Maháls ...	1,816	2,009	46,463	1,440	28,658	48,284	32,107	
Total ...	2,47,227	69,035	9,13,542	50,016	6,08,361	11,60,769	7,27,412	

A. T. SHUTTLEWORTH,
Conservator of Forests, Nothern Circle.

Dated Poona, 31st October 1889.

No. 17 of 1890.

Revenue Department.

Ahmedabad Districts,
Camp Páldi, 5th January 1890.

Submitted to Government.

2. The Conservator has, in paragraphs 1 to 19, concisely summarized the chief features of the report, and the Commissioner, N. D., will now record a few remarks on such portions of Mr. Shuttleworth's able and interesting report as relate to the four forest charges pertaining to the Northern Division, *viz.*, North Thána, South Thána, Surat and the Panch Mahál, as also upon any points of *general* interest noted by the Conservator.

Chapter I.

3. Paragraph 26.—Proposals for the settlement of rights in certain lands in the Modása Petha were submitted to Government under this office No. 3626, dated 18th November 1889. The question of the transfer of these forests to the control of the Forest Department has been deferred until the orders in paragraph 3 of Government Resolution No. 4832 of 6th July 1889 have been carried out, as it will then be probably found possible for the officer in charge of the Gujarát forests to take charge of the Modása Petha.

4. Paragraphs 30, 40 to 43.—The actual progress made in the demarcation of forests by Mr. Owen in the Thána District is not stated, but Mr. Shuttleworth seems satisfied with the amount of work done. It is satisfactory to note that the demarcation of the Panch Mahál forests has been completed. The Conservator appears to consider that the classification of a large proportion of the forest area in Godhra as "Protected" tends to create a feeling of uncertainty, and he also deplores that the forests in the remaining tálukás of the district should have been allowed to continue as protected, but apparently the decision was arrived at after due consideration. Mr. Propert cannot, as yet, form any conclusive opinion on the subject, but hopes to be able to do so after visiting the Panch Mahál.

5. Paragraphs 47 and 48.—Good progress has been made in the erection of boundary-marks in Thána and the Panch Mahál. The completion of these "visible signs" of forest conservation is a matter of great importance; it is clear, however, that a considerable period must elapse before completion is effected.

6. Paragraphs 49 and 57.—It is not clear what progress has been made in settlement enquiries, but the work has been commenced in Máhím and Dáhánu, and it has been completed during the year in Váda. As regards the settlement of old forest areas gazetted under Section 34 of the Forest Act in March 1879, the progress in the Panch Mahál is satisfactory, but nothing appears to have been done in Thána or Surat. The attention of the Collector of Surat has been drawn to the concluding portion of paragraph 8 of the Government Resolution reviewing the last Forest Administration Reports, and he has been requested to state whether any arrangements have been made to proceed with the work during the current season.

7. Paragraphs 61 and 62.—The "destructive privileges" to which the Conservator alludes as having been conceded in the Dohad and Jhálod Tálukás of the Panch Mahál were found by the Forest Settlement Officer to be necessary, and they were granted by Government after full consideration. Mr. Shuttleworth's remarks in paragraph 62 should not therefore have found a place in this report. Such privileges have been found necessary elsewhere, and must be continued, unless it be desired to make forest conservancy a curse to the people.

Chapter II.

8. The Commissioner, N. D., has no desire to raise unnecessary objections to the forest survey scheme, and, as it has been sanctioned by Government, Mr. Propert refrains from minuting upon it in a detailed manner. He cannot however help feeling that the work will be very lengthy, and awfully costly, while the labour bestowed upon many of our Bombay forests will scarcely prove remunerative. The Commissioner, N. D., moreover, cannot understand, except in the case of a few specially valuable tracts, the necessity for surveys on such an enormous scale, and he believes that the contents of most of the ordinary forest areas could be easily treated and disposed of by personal examination, assisted by the ordinary topographical maps. Surely the coupes in the Thána Collectorate and elsewhere might be shown with sufficient accuracy by means of rough hand-made maps prepared by ordinary native surveyors on small salaries attached to the various District Forest Offices.

9. The preparation of working plans appears a very heavy piece of work and likely to extend over a very considerable period, considering the strength of the establishment employed upon it.

Chapter III.

10. Paragraphs 85 and 86.—It is quite certain that the subordinate staff of the Forest Department, at any rate in some districts, needs strengthening, but as the requirements of each district have been duly considered by the Committee appointed to report on the subject in Government Resolution No. 4832, dated 6th July last, it is needless to record any remarks on the subject now. The report of the Committee will, the Commissioner, N. D., hopes, be in the hands of Government before the end of the current month.

11. Paragraph 89.—Except in the Surat Division, there was an increase in the number of prosecutions instituted during the year, which the Conservator ascribes to increased vigilance on the part of the protective staff. The results were not satisfactory in North Thána, where nearly 50 per cent. of the prosecutions were unsuccessful. In South Thána, Panch Mahâls and particularly in Surat, the result was better.

12. Paragraphs 104 to 114.—A much smaller area was traversed by fire in the Thána and Panch Mahâls Districts, but in Surat, there appears a sudden increase from 27,029 acres in 1887-88 to 298,531 in 1888-89, which the Conservator states (paragraph 110) is due to the portion of the Dáng Forests fired during 1887-88 not having been reported correctly in last year's returns. Mr. Shuttleworth acknowledges the assistance of the villagers in helping to put out fires, and their interest might be stimulated a good deal by a judicious system of rewards. It is curious to note how strongly Forest officers of the present day object to "Forest fires". The Commissioner, N. D., thinks that certain authors writing within the past 25 or 30 years have stated that the occasional burning of the undergrowth in forests exercises a beneficial influence on the trees therein.

13. Paragraphs 115 and 117.—The grazing receipts realized during the year show an increase of Rs. 78,310 as compared with the past year, and are almost eight times as much as the receipts of 1878-79. The increase principally occurs in certain Deccan districts owing to forest areas being thrown open in consequence of scarcity of fodder. In this division North Thána contributed Rs. 2,346 to the increase, South Thána Rs. 3,846 and the Panch Mahâls Rs. 412, while in Surat there was a decrease of Rs. 130.

14. Paragraphs 123, 124, 125, 126.—It is natural that the Conservator should inveigh against the grant of thorns for the hedging of fields, but the matter is a difficult one, and Government cannot afford to ignore all measures for the protection of the rayats' crops from the ravages of cattle.

15. Paragraphs 127, 130, 131.—It is to be regretted that despite all precautions, the seedlings in a portion of the South Thána Division were destroyed by fire. At the same time it would seem that too small an amount out of forest revenue is devoted to artificial reproduction in the Presidency. There is, no doubt,

much force in the remarks of the Conservator at the close of paragraph 131 on the subject of natural reproduction in the Konkan and Gujarát. A somewhat larger expenditure, however, on artificial reproduction elsewhere seems to Mr. Propert desirable.

Chapter IV.

16. Paragraphs 149 to 155, 170, 171.—The receipts from departmental fellings were appreciably less than in the previous year in all the forest charges in this division except Surat, the decrease in North Thána being Rs. 10,481-3-3, in South Thána Rs. 18,283-12-0, and in the Panch Mahál Rs. 2,823-6-0; while, on the other hand, in Surat there was an increase of Rs. 23,205-11-2, a portion of which, however, includes the sale-proceeds of a large number of rafters of the previous year. The falling off has been satisfactorily explained by the Conservator, and in the circumstances stated in paragraph 151 the Commissioner, N. D., concurs with Mr. Shuttleworth that the intervention of the Forest Department in the matter of the retail wood trade is no longer necessary.

17. Paragraphs 186 to 192.—The receipts from timber and other produce removed from the forests by consumers or purchasers show considerable development, especially in the North and South Thána ranges. The Conservator expresses a hope (paragraph 188) that the permit system for supplying the wants of the local population may be abandoned, as people can obtain their supplies from the contractors' fellings; the realizations, however, from permit fees do not show any appreciable diminution, and the Commissioner, N. D., would not be in a hurry to put an end to the system.

18. Paragraph 199.—The free grants of timber made in this division were very small indeed, but compare favourably with the previous years (1886-87 and 1887-88). It would seem, however, that the grants referred to in paragraph 172 have not been included in the table in this paragraph.

Chapter V.

19. Paragraphs 202, 203, 204, 205.—The gross revenue is the highest yet reached, and exceeds that of the past year by Rs. 1,92,144, which is very satisfactory. The districts of Thana and Surat contribute Rs. 1,14,098-12-11 to this increase, while in the Panch Mahál, for the reasons explained in paragraph 205, there has been an actual decrease of Rs. 8,777-2-8. The expenditure of the year, however, exceeded that of the preceding year by Rs. 4,276-11-11, and the net revenue therefore shows an increase of Rs. 1,87,866 over last year.

20. Paragraph 207.—Rs. 2,41,836-7-4 were expended under "A—Conservancy and Works" as against Rs. 2,26,095-14-1 in the previous year, which shows an increase of Rs. 15,740-9-3. The principal and only increase in this Division was in South Thána (Rs. 13,651-6-1), while in North Thána, Surat and Panch Mahál there was an aggregate decrease of Rs. 10,371-10-8.

21. Paragraph 211.—The Commissioner, N. D., sees no real advantage likely to be derived from Mr. Shuttleworth's proposal to withdraw certain kuraus from the Military Department. The gain, if any, would represent a mere book entry, and Mr. Propert thinks that for the use of the army Government acts rightly in handing over its own property in the shape of grass at the lowest possible cost.

Chapter VI.

22. *General Remarks.*—Regarding these, the Commissioner, N. D., has only to state that Mr. Shuttleworth and the officers associated with him have, as usual, worked energetically to further the interest of the Forest Department.

W. H. PROPERT,
Commissioner, N. D.

No. $\frac{R.}{445}$ OF 1890.

REVENUE DEPARTMENT.

From

J. G. MOORE, ESQUIRE,
Commissioner, C. D.;

To

THE CHIEF SECRETARY TO GOVERNMENT.

Sholápur Districts,
Camp Karmála, $\frac{27}{29}$th January 1890.

SIR,

I have the honor to submit, with my remarks, the Forest Administration Report of the Northern Circle, for the year 1888-89, received from the Conservator, with his letter, No. 4188, dated the 6th ultimo.

2. Having been living in this Division continuously for the last 17 years, I am in a position to support the Conservator, when he writes of the beneficial change that has come over the mountain and hill ranges under forest protection. I know hill-sides which were comparatively bare and are now covered with fine growth. Take the hills on the south of the railway between Selarvádi and Talegaon Dhamdhera; take the Kátraj and Khamatki Ghátś; take the two sisters; take the western slopes of the Syhádri range where land has been rescued from a very low order of cultivation, and acquired for forest, and the line of forest reserve is defined as clearly as if it had been drawn down the side of the hills with a pencil, nice healthy vegetation on one side and bare land on the other side of the line. I could mention numerous other instances, but I will only quote one more, and that is the low hills between Bhusával and Jámner in the Khándesh District. I revisited this part of the country in February 1889, after a lapse of 15 years, and I was immensely struck by the wonderful growth, which covered what were comparatively bare stony hills. All this cannot be otherwise than beneficial to the country and its people, who are already beginning to appreciate the advantages, resulting from forest conservancy.

Para 2.

3. The net gain to the reserved forests, deducting areas disforested, was 235 square miles and 83 acres. The largest accession to the reserved forest was in the district of Násik, being 170 square miles and 480 acres. It appears, however, from para. 23 of the report, that of this area, 82 square miles and 536 acres merely represent a book adjustment.

Paras. 22 and 23.

4. Khándesh and Násik are the only two districts, in the Central Division, in which forest demarcation has not yet been completed. In one (1) táluka in Násik and in four (4) tálukas in Khándesh, the work remains to be completed and in two (2) tálukas of the latter district, the work has not yet been commenced.

Para. 27.

5. Of lands notified, under Section 4 of the Forest Act, but not finally notified under Section 19, the largest area (*viz.* 198 square miles and 463 acres) is shown against the Khándesh District, the area of similar lands in the other districts of this Division being comparatively small. There is a Special Forest Settlement Officer working in the Khándesh District, who will be able to get through the work in a year or two. It will be seen from para. 32 of the report that, in spite of the disadvantages, arising from an unfavourable climate, and the vast areas to be traversed, which retard the progress of demarcation and settlement work in Khándesh, Mr. Dodgson's record of work is highly creditable to that officer. Mr. Dodgson's report on the demarcation of the Akráni Toranmál reserve, was submitted to Government, with my Memorandum, No. 189, dated the 14th instant.

Paras. 29 and 32.

6. The only táluka, in Násik, of which the demarcation work still remains to be completed, is Dindori. The information, submitted by the Collector of Násik, was incomplete and unsatisfactory, and although I returned the papers, for revision, in the month of July 1889, I have heard nothing more about them up to date. In Ahmednagar, 759 acres and 33 gunthás of occupied lands were acquired for forest, at a cost of Rs. 2,606-12-10. In Poona, the total area of occupied lands, acquired by purchase and exchange, was 655 acres. In the District of Sátara, 132 acres and 1 guntha of occupied lands were purchased at a cost of Rs. 376-7-0, and in Sholápur, no acquisition was made.

Paras. 33 to 39.

7. I agree with Mr. Shuttleworth that the area, taken up for forest, in the Bhore State, under the scheme, proposed by Mr. Sitárám Dámodar, is insufficient. But it is not possible to propose any modifications until the Revenue Survey, which is now in progress in that State, has been completed.

Para. 44.

8. It is satisfactory to note that considerable progress was made, during the year, in erecting cairns to define forest boundaries. Násik District takes the lead in the number (11,412) of cairns, large and small, erected, the cost being Rs. 3,554-3-2, while the smallest number (614) erected was in Ahmednagar, at a cost of Rs. 271-2-6. The definition of forest boundaries, by clear and unmistakeable marks, is of the utmost importance, both in the interests of the "rayats" and the Forest Department, but it is a matter of money, and I have no doubt that the work will be pushed forward, as quickly, as the funds, at the disposal of the Conservator, will permit.

Paras. 47 and 48.

9. The statement, embodied in this para., shows that in the Násik and Poona Districts of the Central Division, there are 84 and 192 square miles, respectively, of areas of old forest, notified under Section 34 of the Forest Act, in which private rights have not been enquired into, settled and recorded. No progress was, however, made in the matter of settling and recording these rights. This is much to be regretted.

Para. 57.

10. I fully agree with Mr. Shuttleworth in the general remarks, which he has recorded in para. 62, from his own standpoint; but Government has, it should be remembered, to consider the welfare of the population at large, including wild tribes, as well as the necessity for forest conservancy, and it would be injudicious, with a stroke of the pen, to introduce a rigorous code of forest rules, as such a proceeding would be likely to cause serious hardship and discontent. I trust, however, that the code of privileges for the Khándesh District, in its modified form, will give, to the Forest Department, all that they can fairly expect, at present, in the restriction of privileges, and that, as time rolls on, and the necessity for forest conservancy is better understood, the privileges will be gradually withdrawn, as there is no doubt that they retard conservancy.

Paras. 60 to 62.

11. The institution of the Special Forest Survey Branch is, no doubt, a step in the right direction; the maps, which it will prepare, will greatly facilitate administration, and, for the reasons, given by Mr. Shuttleworth, I agree with him that the 8-inch scale, which is superfluous for Northern or Central India, is a necessity for this part of the country. The operations of the Survey were in progress in Násik, Poona and Sátára of the Central Division, during the year under report.

Paras. 64 to 69.

12. The necessity for strengthening forest establishments has been brought to the notice of Government and I am sure that this important matter will receive due and favourable consideration at their hands. Increased establishment means an increase of revenue, so that any additional expense will soon be covered.

Paras. 85 and 86.

13. From the figures, embodied in para. 89 of the report, it appears that, of the 1,031 prosecutions for forest offences during the year, 699 were instituted in the Central Division, as against 405 during the previous year. The increase in the number of prosecutions is attributed to "increased vigilance on the part of the protective staff" and, doubtless, this is the case. The percentage of failures in prosecutions

Paras. 89 to 92.

during the year, under report, is about the same as during the previous year, in so far as the entire Northern Circle is concerned; but, if the calculation is limited to the figures for the Central Division alone, there was a perceptible improvement in that respect during the year under report. The failures in 1888-89 were 22·8 only, in the Central Division, while in 1887-83, they amounted to 27·4. The improvement is specially noticeable in Poona and Násik.

Para. 93.

14. The table, given in this para., shows that, in so far as this Division is concerned, prosecutions for "injury to forest by fire" was much larger in Khándesh than in any other district. No less than 11 such prosecutions were instituted in Khándesh—a figure which greatly exceeds that for any other district in the *entire Circle*. This speaks well for the vigilance and zeal of the protective establishment in Khándesh and reflects unfavourably on the establishments in North and South Thána, especially, where fires, judging from my own experience, are constantly occurring. The figures, against the Poona District, appearing under the columns "unauthorized felling or appropriation of wood and minor forest produce" and "grazing without permission or in tracts in which grazing is prohibited" also disclose the ease with which offences against the forest law are committed. When the erection of boundary-marks is extended, there will, probably, be a decrease in these offences.

Paras. 96 to 98.

15. The number of cases, compounded under Section 67 of the Forest Act, during the year under report, was perceptibly larger than in the previous year. The increase is marked in every Division of the Northern Circle, except Surat. The total amount, realised in the Circle, on account of the compromises, was Rs. 11,271-14-11. The explanation of the increase, given by the Conservator, is that "the scarcity of fodder for cattle, which was felt during the year, in some of the Deccan districts, induced much trespassing of famishing cattle into plantations and closed forests."

Paras. 99 and 100.

16. The number of cattle, impounded in the Deccan districts, is, as remarked by Mr. Shuttleworth, very large; and it is especially so in Poona and Ahmednagar. It is also to be noticed that the number of sheep and goats, impounded in these two districts, was exceptionally large. The matter, no doubt, calls for serious consideration, especially with regard to goats, whose destructive propensities are well known. I agree with the Conservator in thinking that the rates of grazing fees should be increased for the reasons given by him. It is all very well to say that, instead of raising the fees, it would be better to prosecute the offending parties, but it would be impossible to do so in every case, and the whole time of the present comparatively weak establishment would be occupied in attending magistrates' courts. I think, however, that the work of erecting boundary marks should be pushed on with vigour, so that parties, who might be prosecuted, would not, then, be in a position to say that they did not know their cattle were trespassing. If the owners of cattle, which are found trespassing, were obliged to pay the grazing fees for each head of cattle found trespassing, and if the fees are raised, we should soon find a great decrease in the number of trespasses committed.

Paras. 104 to 114.

17. The statement, embodied in para. 111 of the report, shows that, in the Central Division, the forest area, burnt by fire, during the year under report, was larger in West Khándesh, Násik and Sholápur, and smaller in the other forest divisions, as compared with the previous year. The percentage 18·7 of forest burnt to the entire forest acreage (5,413,910) is in excess of that for last year, which was only 10·8. The causes, which led to this result, in a general and special way, are detailed in paras. 104, 109 and 110 of the report. At the close of para. 104, the Conservator states as follows:—"A complete report, regarding every fire, was drawn up and submitted to the Conservator by the Divisional Forest Officer; and thus the proceedings of all parties, who were responsible for fire conservancy, where fires appeared, came under close inquiry." It would have been well, if the Conservator could have classified the fires, that occurred, under different heads, indicating the causes to which they were traceable, as such

information would have been valuable, in the way of suggesting the particular remedial measures that might be suitable to the peculiar conditions of each case. I think that the sympathy and co-operation of the heads of villages and the rayats generally, ought, considerably, to minimize the mischief that is now caused by forest fires; and an increase, in the numerical strength of the Forest Guards, would tend in that direction also. But a system of rewards should, I think, be tried on a larger and more liberal scale, and this, combined with strong repressive measures, where intentional mischief or culpable negligence is proved, would, probably, lead to a considerable diminution in these extensive and much-to-be-deplored fires, which, annually, do so much mischief. The total expenditure, on account of rewards and wages, during the year under report, amounted to Rs. 1,697, a large proportion of it being expended in the North Thána Division.

Paras. 115 and 116.

18. The revenue, from grazing and fodder grass, has continued to develop steadily during the last ten years; and the receipts, for the year under report (Rs. 3,27,165), show a very marked improvement over those of the previous years. If anything is wanting to show the beneficial results of forest conservancy, the figures, in the statement under para. 115, supply this want. Of course, I am aware that many kurans have been included in forest and that the Department cannot take credit to itself for producing the grass in such lands; but the fact, that, whenever there is a scarcity of fodder, outside forest reserves, a demand is made on the Department to throw open the forests for grazing, proves that conservancy is a grass-producing agency. Our gáiráns, as any officer of experience can state, are not pasture lands, but merely exercise grounds for cattle. As a rule, they produce nothing but spear grass; but even in such lands, with shade, even if it be the shade of bushes and scrub, the spear grass will disappear and good wholesome nutritious grass will take its place; the more we extend our forest area, the more fodder will the cattle get. The ignorant classes may cry out, but, in the end, they will bless the Forest Department.

Paras. 123 to 126.

19. Mr. Shuttleworth's views, regarding the injury to forest growth, by cultivators being allowed to cut thorns, are correct; if there were a luxuriant growth of trees with thorns, there would be no objection to the practice, but when it is a matter of bushes only, and, when we want all the cover and shade, that is available, for the protection of our hill-sides, for the nursing and growth of seedlings, and for the production of good grass, it is quite a different matter, and permission to cut thorns should only be given where a responsible forest officer considers that it can be done without any evil results. The Bill, for the preservation of game and fish, which was brought forward in 1881, was vetoed by the Government of India, but I should be very glad to see the subject reopened in good earnest, and terminated by the passing of a game law.

Paras. 128 to 130.

20. Plantation operations were undertaken in all the districts of the Central Division; but, owing to the scanty rainfall, they were not particularly successful except in the Násik District. Artificial reproduction is uphill work in the Deccan, the results are, from my experience, very discouraging, but, nevertheless, we must persevere, and, if only a few seeds germinate and a few seedlings survive annually, some good will be gained; and, after all, simple broad-casting, carried out by beat-guards, is very inexpensive.

Para. 131.

21. There is a great deal of truth in the Conservator's remarks on my comments on the luxuriant growth of bábul on the slopes of the embankments of the West Deccan Railway, and the suggestion that plots should be excavated, sown and fenced, here and there, over the adjoining bare tracts; at the same time, I should like to see the experiment tried. The secret of the growth of the bábul, on the railway embankments, is that the soil is loose and there is good drainage—but these conditions would exist if, here and there, in the bare tracts, the soil was loosened to a depth of a few feet. I have seen a luxuriant growth of seedlings in heaps of gravel and moorum, stacked, on a road side, for the purposes of road repairs, but not utilised for a year or two.

22. It is satisfactory to note that the experiments with exotic trees, made in the Ahmednagar and Násik Districts, have proved a success so far as they have gone. The experiments, with the date-palm, have not, however, been very hopeful. I do not, however, attach much importance to these experiments with exotic trees in the way of Forestry. I prefer to see the growth of indigenous trees encouraged.

Paras. 134 and 135.

23. Considerable progress was made in the construction of roads in Khándesh, Násik and Poona, which will open out tracts of forests in those districts. The proposed branch railway from Manmád to Surat *viâ* Dhulia, will be as useful to the Forest Department, as it will be to the general trade of the country. The construction of roads, opening up the valleys leading from the Western Ghâts and connecting them with the trunk roads, will prove of incalculable benefit, both to the Forest Department and to the inhabitants of those jungle tracts.

Paras. 136 to 146.

24. The following facts and figures are deducible from the information supplied in these paras. :—

Paras. 156 to 166.

Forest Division.	Teak felling Operations.			Firewood cutting Operations.		
	Receipts.	Cost.	Percentage of Cost to Receipts.	Receipts.	Cost.	Percentage of Cost to Receipts.
	Rs.	Rs.		Rs.	Rs.	
East Khándesh	17,810	3,643	20·4	Not separately given.		
West do.	19,859	3,251	16·3	2,584	1,729	66·8
Násik	30,048	2,738	9·1	Not separately given.		
Poona	27,699	2,935	10·5	10,940	2,430	22·2
Sátára	15,225	1,643	10·7	3,901	1,768	45·3

The operations in the Ahmednagar District were on a small scale and those in Sholápur were next to none.

25. The foregoing figures clearly show that the cost of felling operations, in the case of firewood, is, as compared to receipts, undoubtedly greater than in the case of teak. East Khándesh and Násik, for which the figures are not given separately, should be excluded from consideration; but the figures for the remaining divisions show that the cost, in the case of firewood cuttings, was, in West Khándesh and Sátára, four times as much as in the case of teak cuttings, and that, in the Poona District, it was twice as much. On the other hand, it is remarkable that, in the case of the Násik District, for which separate figures, on account of teak and firewood operations, are not given, and where, therefore, the proportion of "cost to receipts" might be expected to be high, as in East Khándesh, it was 9·1 only—a proportion less than in the case of any of the three divisions for which separate figures are available. This apparent incongruity is, however, explained by the fact that the receipts, on account of the Násik District, include the sale-proceeds of timber cut down last year and the cost of which must, evidently, have been included in the last year's figures (*vide* statement embodied in para. 161).

26. "Hirda" was collected in four districts of the Central Division, *viz.* Násik, Ahmednagar, Poona and Sátára. In Sholápur there is probably no "hirda" to collect; but I cannot understand why none was, apparently, collected in Khándesh, especially as it is not an article which the Bhils are allowed to take free of charge. The receipts, on account of "hirda", have increased, almost cent per cent., during the year under report and the increase is perceptible in every district except Násik where the quantity collected was not sold.

Paras. 179 to 185.

27. The value of the free grants of timber, made during the year under report, was less than in the previous year, in each of the districts of the Central Division, except Poona.

Para. 199.

Most of the grants, in the Poona District, were made to give relief to poor people whose houses had been destroyed by fire: the grants, made in the case of "Majre" Bhilarwádi in táluka Bhimthadi alone, amounted to Rs. 490 (*vide* Government Resolution, No. 6890, dated 16th October 1888).

Paras. 202 to 211.

28. The financial results of the year's forest administration are, no doubt, most satisfactory. The gross revenue of the year under report is the largest on record since 1878-79, and the net revenue shows an increase of Rs. 1,87,866-9-1, in comparison with the previous year. The tendency of the revenue to expand is observable in every Forest Division of the Northern Circle. The causes of increase and decrease in revenue, as well as expenditure, have been explained, in detail, by the Conservator. I do not think that the Military Department will consent to receive their supplies of grass from the open market instead of, as at present, from the excellent forest "kurans", reserved for the Commissariat, but I should be very glad, if it could be arranged.

29. In handing on this report to Government, I have much pleasure to record my sense of the excellent manner in which Mr. Shuttleworth has administered the Circle under his charge. His unremitting zeal, his thorough knowledge of all the details of his department, his wonderful activity and his all-absorbing devotion to duty, are too well known to need any testimony from me.

I have the honor to be,
Sir,
Your most obedient Servant,
J. G. MOORE,
Commissioner, C. D.

SOUTHERN CIRCLE.

No. 3402 A of 1889-90.

From

J. L. L. MacGREGOR, Esquire,
Conservator of Forests, Southern Circle ;

To

The CHIEF SECRETARY to GOVERNMENT,
Revenue Department,
Bombay.

Belgaum, 16th November 1889.

Sir,

I have the honour to submit herewith the Forest Administration Report of the Southern Circle for the year 1888-89, with its subsidiary statements.

~~I have~~ the honour to be,
Sir,
Your most obedient Servant,
J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Through the Commissioner, S. D.